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EXAMINER	
WOODS, TERESA S	

ART UNIT	PAPER NUMBER
4114	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/737,076	NELSON ET AL.	
	Examiner	Art Unit	
	TERESA WOODS	4114	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *12/16/2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of Claims

1. This action is in reply to the application filed on 12/16/2003.

2. Claims 1-38 are currently pending and have been examined.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-21 are rejected under 35 U.S.C. 101 because there is no machine tied to the method along with no physical transformation being produced.

5. Claims 30-38 are rejected under 35 U.S.C. 101 because the claims are directed to a system of monitoring activity, but do not claim any structural, hardware components other than sensors. Therefore, not encompassing a system in its entirety.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 36 and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by David (US 5,544,649 A).

8. **Claim 36:**

David, as shown, discloses the following limitations:

- *a receiver to receive activation signals from a sensor activated by an individual during activities of daily living* (see at least Fig. 7, column 19; lines 25-33, column 21; lines 26-29);
- *a processing unit to tabulate the received signals; and* (see at least Fig. 9, column 19; lines 25-28);

- *a contacting unit to initiate contact with a third party when directed by the processing unit* (see at least column 11; lines 61-65).

9. **Claim 37:**

David, as shown, discloses the following limitations:

- *wherein the device is a self contained, stand-alone device* (see at least Fig. 7, Fig. 10, column 18; lines 50-53).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 1-5, 8, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over David (US 5,544,649 A) in view of Official Notice.

13. **Claim 1:**

David, as shown, discloses the following limitations:

- *monitoring a sensor activated by an individual* (see at least column 7; lines 37-42);
- *recording activation of the sensor* (see at least Fig. 10, column 10; lines 6-9);
- *determining a behavior routine of the individual based on recorded activations of the sensor* (see at least column 10; lines 13-17 and lines 62-66);
- *analyzing the recorded sensor activations to determine a behavior routine; and* (see at least Fig. 6, Fig. 7, column 20; lines 15-20)
- *in the behavior routine based on the analysis of the recorded sensor activations* (see at least column 20, lines 15-20).[

David does not disclose *"Identifying a change in the behavior routine"*. However, the Examiner takes **Official Notice** that it is old and well-known in the medical arts that the analysis of recorded sensor activity would be directly linked to a change in a patient's behavior. It would have been obvious to a person having ordinary skill in the art at the time of invention to combine *"Identifying a change in the behavior routine"* with David's method for maintaining an individual's sensor activations because it would provide a more comprehensive monitoring method to understand the details of a diagnosis.

14. **Claim 2:**

David, as shown, discloses the following limitations:

- *further including initiating contact to a third party* (see at least column 11, lines 61-65).

15. **Claim 3:**

David discloses *"wherein initiating contact to a third party includes initiating contact with a third party"* (see at least column 2, lines 6-11 and 18-19). David does not disclose *"initiating contact with a third party on a hierarchical list of third party contacts"*. However, the Examiner takes **Official Notice** that it is old and well-known in the medical arts to have rank-based, protocol notifying individuals who are personal to the patient or medical professionals based on the seriousness of the patient's condition. Therefore, it would have been obvious to a person having ordinary skill in the art at the time of invention to combine a hierarchy of medical responsive people with David's method for maintaining an individual's sensor activations because it would better utilize the medical staff needed in the event of an emergency.

16. **Claim 4:**

David discloses *"selecting a third party based on the level of change in the behavior routine"* (see at least column 2, lines 6-11 and 18-19; column 7, lines

55-61). David does not disclose *"initiating contact with a third party on a hierarchical list of third party contacts"*. However, the Examiner takes **Official Notice** that it is old and well-known in the medical arts to have rank-based, protocol notifying individuals who are personal to the patient or medical professionals based on the seriousness of the patient's condition. Therefore, it would have been obvious to a person having ordinary skill in the art at the time of invention to combine a hierarchy of medical responsive people with David's change in an individual's sensor activations because it would better utilize the medical staff needed in the event of an emergency.

17. **Claim 5:**

David discloses *"further including initiating automated contact with a third party"* (see at least Fig. 10, column 8, lines 54-58; column 17, lines 5-7). David does not disclose *"initiating contact with a third party on a hierarchical list of third party contacts"*. However, the Examiner takes **Official Notice** that it is old and well-known in the medical arts to have rank-based, protocol notifying individuals who are personal to the patient or medical professionals through automated means. Therefore, it would have been obvious to a person having ordinary skill in the art at the time of invention to combine a hierarchy of medical responsive people with David's means for contacting a third party urgently because it would provide a quicker response to a patient in an emergency situation.

18. **Claim 8:**

David, as shown, discloses the following limitations:

- *wherein the method further includes providing a sensor with a level of priority* (see at least column 8; lines 21-23).

19. **Claim 11:**

David discloses the limitations as shown in the rejections above. David does not disclose the following limitation, but Nichols discloses *"wherein using a pattern recognition algorithm includes using an algorithm based on a Bayesian decision theory"*. However, the Examiner takes **Official Notice** that it is old and well-known in the art of Statistics to utilize an algorithm based on a Bayesian decision theory. Therefore, it would have been obvious to a person having ordinary skill in the art at the time of invention to use a Bayesian decision theory to have the best possible options needed to review any failed treatment for diagnosis.

20. Claims 6, 7, 9, 10, 22-35 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over David (US 5,544,649 A) in view of Official Notice and in view of Nichols (US 5,330,513 A).

21. **Claim 6:**

David discloses the limitations as shown in the rejections above. David does not disclose the following limitation, but Nichols discloses *"further including grouping sensors within particular classes of daily activities"* (see at least Fig. 1, Fig. 2, column 5; lines 59-68, column 48, lines 17-20). In this reference, the sensors are grouped into two categories according to the rate control parameters. One measures the activity-based rate. The other measures the pressure-base rate. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine David's ability to monitor behavior sensors to Nichol's activity grouped sensors to provide optimum sensing to trouble-shoot patient problems.

22. **Claim 7:**

David discloses the limitations as shown in the rejections above. David does not disclose the following limitation, but Nichols discloses *"wherein identifying a change in the at least one behavior includes comparing activations of a group of sensors within a class to a threshold"* (see at least Fig. 4, column 18; lines 1-2, column 26; lines 9-21). In this reference, the activity-base rate sensors, mentioned above in the limitations of claim 6, are further displayed as a range in sensor counts that signal adjustments once the threshold is overcome. It would have been obvious to one of ordinary skill in the art at the time of the invention to

combine David's ability to monitor behavior sensors to Nichol's behavior changed activation to provide optimum sensing to trouble-shoot patient problems.

23. **Claim 9:**

David discloses the limitations as shown in the rejections above. David does not disclose the following limitation, but Nichols discloses *"wherein identifying a change in the behavior routine includes weighting sensor activations differently based upon the sensor's level of priority"* (see at least column 48; lines 12-20). This reference embodies the distinction between sensors based on pre-set parameters. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine David's ability to monitor behavior sensors to Nichol's weighing sensors based on priority levels to better understand the details involved with the diagnosis of any failed treatment.

24. **Claim 10:**

David discloses the limitations as shown in the rejections above. David does not disclose the following limitation, but Nichols discloses *"wherein analyzing the recorded sensor activations to determine a behavior routine includes using a pattern recognition algorithm"* (see at least column 45; lines 19-35). This reference embodies the analyzing factors to determine a needed rate set with an algorithm. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine David's ability to monitor behavior

sensors to Nichol's algorithm used to analyze behavior sensors to better understand the details involved with the diagnosis of any failed treatment.

25. **Claim 22:**

David discloses the limitations as shown below:

- *sensing data counts associated with an activity of daily living for an individual* (see at least column 6; lines 21-25, column 22; lines 20-23) ;

David does not disclose the following limitation; however Nichols, as shown below, does:

- *determining a statistical change in the data counts relative to expected data counts for the activity of daily living* (see at least Fig. 2A, column 5; lines 59-63);
- *when the statistical based change exceeds the statistical threshold value* (see at least column 22, line 65 to column 23, line 15).
- *identifying when the statistical change in the data counts relative expected data counts exceed a statistical threshold value* (see at least Fig. 2A, column 5; line 65 to column 23, line 15);
- *based on the activity of daily living for which the statistical change in the data counts relative expected data counts exceed the statistical threshold value; and* (see at least Fig. 2A, column 22; line 65 to column 23; line 15);

When referring to Fig. 2A, emphases are put on a sensor target rate versus the actual counts of an individual's physical activity. The second reference explains a sensor's count performance falling above the expected optimization

rage. Neither references disclose the limitations, "*selecting a third party on a hierarchical third party list" and "initiating automated contact to the third party on the hierarchical third party list".* However, the Examiner takes **Official Notice** that it is old and well-known in the medical arts to have rank-based, protocol notifying individuals who are personal to the patient or medical professionals based on the seriousness of the patient's condition. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine David's contact to a third party based on a statistical threshold to Nichol's expected activity counts to better provide a more comprehensive monitoring method to understand the details of a diagnosis. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Nichol's statistical change in data with David's notification of a third party to provide detailed analysis needed to better understand any failed treatment of a patient.

26. Claim 23:

David discloses the limitations as shown in the rejections above. David does not disclose the following limitation, but Nichols discloses *"further including adjusting the expected data counts of an activity of daily living based upon the statistical change in the data counts for the activity of daily living"* (column 50; lines 8-12). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine David's third party contact during threshold counts with

Nichol's ability to adjust the data count to provide quality treatment and to avoid possible failed healthcare.

27. **Claim 24:**

David discloses the limitations as shown in the rejections above. David does not disclose the following limitation, but Nichols discloses *"further including providing a predetermined amount of information about the individual and the activity of daily living to the third party on the hierarchical third party list"* (column 50; lines 8-12). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine David's third party contact during threshold counts with Nichol's notification of predetermined information to further optimize the review of any failed treatment while providing quality healthcare to patients.

28. **Claim 25:**

Nichols discloses the limitations as shown in the rejections above. Nichols does not disclose *"initiating automated contact to a third party on a hierarchical third party list further includes prompting the individual to confirm that automated contact to the third party should be made".* However, the Examiner takes **Official Notice** that it is old and well-known in the medical arts to have rank-based, protocol notifying individuals who are personal to the patient or medical professionals based on the seriousness of the patient's condition. Therefore, it would have been obvious to a person having ordinary skill in the art at the time of

invention to combine a hierarchy of medical responsive people with David's method for maintaining an individual's sensor activations because it would better utilize the medical staff needed in the event of an emergency.

29. **Claim 26:**

Nichols discloses the limitations as shown in the rejections above. Nichols does not disclose the *"further including placing the third party contacts in tiers of third party contacts wherein at least one tier includes multiple third party contacts*". However, the Examiner takes **Official Notice** that it is old and well-known in the medical arts to have rank-based, protocol notifying individuals who are personal to the patient or medical professionals based on the seriousness of the patient's condition. Therefore, it would have been obvious to a person having ordinary skill in the art at the time of invention to combine a hierarchy of medical responsive people with David's method for maintaining an individual's sensor activations because it would better utilize the medical staff needed in the event of an emergency.

30. **Claim 27:**

David, as shown, discloses the following limitations:

- *requesting automated contact to the third party on the hierarchical third party list by the individual; and* (see at least column 5; lines 45-58);

- *initiating the automated contact to the third party on the hierarchical third party list at the request of the individual* (see at least column 5; lines 45-58).

  It would have been obvious to one of ordinary skill in the art at the time of the invention to combine David's multiple third party contacts with Nichol's notification of a third party to provide detailed analysis needed to further optimize the review of any failed treatment while providing quality healthcare to patients.

31. **Claim 28:**

David discloses the limitations as shown in the rejections above. David does not disclose the following limitation, but Nichols discloses *"identifying a sensor that is not transmitting data counts based on the statistical change in the data counts of the sensor relative to expected data counts for the sensor"*. However, the Examiner takes **Official Notice** that it is old and well-known in the Electronics arts that a non-transmitting sensor would work improperly. Therefore, a failed sensor would compromise the accuracy of the statistical threshold data counts. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have sensors that work properly to obtain the best possible data counts to maximize the quality of healthcare provided for patients.

32. **Claim 29:**

David discloses the limitations as shown in the rejections above. David does not disclose the following limitation, but Nichols discloses *"further including adjusting*

the expected data counts for the sensor based upon the statistical change in the data counts" (N, see at least Fig. 2A, Fig. 2B, column 18; lines 57-68). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine David's non-transmittal sensor with Nichol's adjustment based on changes in the data count to further optimize the review of any failed treatment while providing quality healthcare to patients.

33. **Claim 30:**

David discloses the limitations as shown below:

- *means for signaling that a sensor has been activated by an individual during activities of daily living* (see at least column 7; lines 37-40, 6; lines 21-25) ;

The first reference suggests the same daily activities being monitored by using sensors. The second reference describes a patient's daily activity and health having 24-hour supervision. David does not disclose the following limitation; however Nichols, as shown below, does

- *a receiver to receive signals,* (see at least Fig. 7, column 19; lines 25-33);

This reference describes a device that receives sensor signals, but David does not disclose "*indicating that the sensor has been activated".* However, the Examiner takes **Official Notice** that it is old and well-known in the electronics arts to have hardware to indicate that a sensor has been activated.

- *a tabulation unit to tabulate the number of received signals* (see at least Fig. 7, Fig. 8, column 19, lines 24-29 and 45-47);

  This reference describes the receiving unit that stores the transmitted sensor signals.

- *a contacting unit to initiate contact with a third party when the analysis unit identifies a change in the behavior routine* (see at least column 11; lines 9-14 and lines 61-65).

  The first reference notifies the medical staff and the second reference notifies individuals helpful in the event of an emergency.

- *an analysis unit to analyze the tabulated signals to determine a behavior routine and identify changes in the behavior routine; and* (see at least column 49; lines 12-18).

  David This reference embodies an analyzer and is more comprehensive to include images to see patient's behavior changes. It would have been obvious to one of ordinary skill in the art at the time of the invention to have activated hardware indicating that the sensor is operational along with David's complete sensor system to provide an optimum performance of sensors needed to detect a patient's activity and accuracy of monitoring because it would improve the quality of healthcare for individual being cared for in remote locations away from a hospital.

34. **Claim 31:**

David, as shown, discloses the following limitations:

- *wherein means for signaling includes a sensor worn by the individual* (see at least Fig. 7, Fig. 10, column 18; lines 50-53) .

35. **Claim 32:**

David, as shown, discloses the following limitations:

- *wherein the sensor worn by the individual is a sensor that is actuated when the sensor is located within range that includes a dwelling and a portion of land on which the dwelling is situated.* (see at least Fig. 6, Fig. 7, column 11; lines 15-25).

These references display and explain a healthcare monitoring system that operate within a family dwelling, hospice or small private hospital.

36. **Claim 33:**

David discloses the limitations as shown in the rejections above. David does not disclose the following limitation, but Nichols discloses *"wherein means for signaling includes digital sensors"* (see at least column 10; lines 6-9). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine David's digital sensors with Nichol's notification of a third party of detailed analysis to provide an optimum variety of sensors needed to detect patient's activity and accuracy of monitoring.

37. **Claim 34:**

David discloses the limitations as shown in the rejections above. David does not disclose the following limitation, *"wherein the means for signaling includes analog sensors"*. However, the examiner takes **Official Notice** that it is old and well-known in the Electronics art to utilize analog sensors for optimized equipment needed to monitor any failed treatment for diagnosis. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine David's analog sensors with Nichol's notification of a third party of detailed analysis to provide an optimum variety of sensors needed to detect patient's activity and accuracy of monitoring because it would improve the quality of healthcare for individual being cared for in remote locations away from a hospital.

38. **Claim 35:**

David discloses the limitations as shown in the rejections above. David does not disclose the following limitation, *"wherein the analog sensors produce a Boolean output"*. However, the examiner takes **Official Notice** that it is old and well-known in the Electronics art for analog sensors to produce a Boolean output for optimized equipment needed to monitor any failed treatment for diagnosis. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine David's Boolean output with Nichol's notification of a third party of detailed analysis to provide an optimum variety of sensors needed to

detect patient's activity and accuracy of monitoring because it would provide better healthcare for patients in remote locations away from a hospital.

39. **Claim 38:**

David discloses the limitations as shown in the rejections above. David does not disclose the following limitation, but Nichols discloses *"wherein the device includes an additional functionality selected from: a radio, a clock radio, an alarm clock, a telephone, and an answering machine"* (see at least column 8; lines 34-45). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine David's device for monitoring activity to Nichol's functionality selections to provide better options needed to review any failed monitoring and treatment during diagnosis.

40. Claims 12-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nichols (US 5,330,513 A) in view of David (US 5,544,649 A) and in view of Official Notice.

41. **Claim 12:**

Nichols discloses the limitations as shown in the rejections below.

- *recording data counts from sensors activated by an individual during a time period* (see at least column 3; line 68 to column 4; line 13);

- *identifying statistical changes in the data counts relative to expected data counts during the time period; and* (see at least column 4; lines 9-16);

Nichols does not disclose the following limitation, but David discloses:

- *"initiating automated contact to a third party on a hierarchy third party list identified by the individual when a statistical change exceeds a statistical threshold value* (see at least Fig. 2A, column 5; line 65 to column 23, line 15);

When referring to Fig. 2A, emphases are put on a sensor target rate versus the actual counts of an individual's physical activity. The second reference explains a sensor's performance falling below the expected optimization rage. However, the Examiner takes **Official Notice** that it is old and well-known in the medical arts to have rank-based, protocol notifying individuals who are personal to the patient or medical professionals based on the seriousness of the patient's condition. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine David's contact to a third party based on a statistical threshold to Nichol's expected activity counts to better provide a more comprehensive monitoring method to understand the details of a diagnosis.

42. **Claim 13:**

David discloses the limitations as shown in the rejections above. David does not disclose the following limitation, but Nichols discloses *"associating the data count with an activity of daily living; and placing the data counts into groups based on activities of daily living* (see at least column 48; lines 17-23). It would have been

obvious to one of ordinary skill in the art at the time of the invention to combine David's ability to notify staff and keeping records to Nichol's placement of data counts to provide quality diagnosis from trained staff which would provide beneficial treatment to medical patients.

43. **Claim 14:**

Nichols discloses the limitations as shown in the rejections above. Nichols does not disclose the following limitation, but David discloses *"wherein initiating automated contact to a third party on a hierarchical third party list includes analyzing the data counts in a group for statistical change that exceeds the statistical threshold value"* (see at least column 11, lines 61-65). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine David's ability to notify staff and keeping records to Nichol's placement of data counts to provide quality diagnosis from trained staff which would provide beneficial treatment to medical patients.

44. **Claim 15:**

Nichols discloses the limitations as shown in the rejections above. Nichols does not disclose the following limitation, but David discloses *"further including setting the time period to a value of one (1) hour or greater"* (see at least column 9; lines 50-56, column 22; lines 18-27). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine David's time period settings

to Nichol's activity grouped sensors to better provide a more comprehensive monitoring method to understand the details of a diagnosis.

45. **Claim 16:**

Nichols discloses the limitations as shown in the rejections above. Nichols does not disclose *"wherein initiating automated contact to a third party on a hierarchical third party list includes identifying at least two statistical based changes that exceed the statistical threshold value"*. However, the Examiner takes **Official Notice** that it is old and well-known in the medical arts to have rank-based, protocol notifying individuals who are personal to the patient or medical professionals based on the seriousness of the patient's condition. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Nichol's statistical data counts with a third party contact based on exceeded threshold values to better provide a more comprehensive monitoring method to understand the details of patient diagnosis.

46. **Claim 17:**

Nichols discloses the limitations as shown in the rejections above. Nichols does not disclose the following limitation. However, the Examiner takes **Official Notice** that it is old and well-known in the art Statistics to utilize Boolean logic when recording data counts for sensors to optimize methods needed to obtain accurate and dependable sensor readings. Therefore, it would have been obvious to a

person having ordinary skill in the art at the time of invention to use Boolean logic to provide better options needed to review any failed monitoring and treatment during diagnosis.

47. **Claim 18:**

David discloses the limitations as shown in the rejections above. David also discloses "*further including self-diagnosing an operational condition"* (see at least column 3; lines 42-51). Although this reference shares the negative aspects of a patient utilizing self-operative devices, they are widely used. David does not disclose the following limitation, but Nichols discloses "*of a monitoring system based on the recorded data counts*" (see at least column 5; lines 14-25). This reference encompasses a stand-alone, diagnosing system based on data counts. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine David's record of statistical changes in data counts to Nichol's self-diagnosis to provide quality diagnosis from trained staff and beneficial treatment to medical patients.

48. **Claim 19:**

David discloses the limitations as shown in the rejections above. David does not disclose the following limitation, but Nichols discloses *"further including diagnosing an operational condition of a sensor in the monitoring system*" (see at least column 5; lines 14-25). This reference encompasses a diagnosing system

based on data counts. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine David's record of statistical changes in data counts Nichol's diagnosing an operational condition to provide quality diagnosis from trained staff and beneficial treatment to medical patients.

49. **Claim 20:**

David discloses the limitations as shown in the rejections above. David does not disclose the following limitation, but Nichols discloses:

- *developing an expected count for the activity of daily living over the time period; and* (see at least column 5; lines 59-63, column 50; lines 10-12)
- *initiating automated contact to a third party on the hierarchical third party list when the recorded counts are statistically less than the expected count for the activity of daily living over the time period* (see at least Fig. 2A, column 22; line 65 to column 23; line 12).

When referring to Fig. 2A, emphases are put on a sensor target rate versus the actual counts of an individual's physical activity. The second reference explains a sensor's performance falling below the expected optimization rage. However, the Examiner takes **Official Notice** that it is old and well-known in the medical arts to have rank-based, protocol notifying individuals who are personal to the patient or medical professionals based on the seriousness of the patient's condition. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine David's contact to a third party based on a

statistical threshold to Nichol's expected activity counts to better provide a more comprehensive monitoring method to understand the details of a diagnosis.

50. **Claim 21:**

Nichols discloses the limitations as shown in the rejections below:

- *developing an expected count for the activity of daily living over the time period* (see at least column 5; lines 59-63, column 50; lines 10-12);

Nichols does not disclose the following limitation:

- *initiating automated contact to a third party on a hierarchical third party list identified by the individual when a statistical change exceeds a statistical threshold value* ;
- *wherein initiating automated contact to a third party on a hierarchical third party list includes prompting the individual to confirm that automated contact to the third party should be made.*

However, the Examiner takes **Official Notice** that it is old and well-known in the medical arts to have rank-based, protocol notifying individuals who are personal to the patient or medical professionals based on the seriousness of the patient's condition. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Nichol's statistical data counts with a third party contact based on exceeded threshold values to better provide a more comprehensive monitoring method to understand the details of patient diagnosis.

Conclusion

Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to **Teresa Woods** whose telephone number is **571.270.5509.** The Examiner can normally be reached on Monday-Friday, 9:30am-5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, **JAMES A. REAGAN** can be reached at **571.272.6710**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://portal.uspto.gov/external/portal/pair . Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866.217.9197** (toll-free).

Any response to this action should be mailed to:

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or faxed to **571-273-8300**.

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Examiner, Art Unit 4114

/James A. Reagan/

Supervisory Patent Examiner, Art Unit 4114